

individual being found affected. I might instance such species as *Andrena nigroænea*, *A. varians*, *Halictus tumulorum*, *H. cylindricus*, and others.

The *genus Prosopis* is also said to have been found showing signs of the escape of the parasite, but none of our other *genera* appear to be liable to its attack.

Sopworth Rectory, Chippenham :
December, 1891.

NEUROPTERA OBSERVED IN THE CHANNEL ISLANDS IN
SEPTEMBER, 1891.

BY ROBERT McLACHLAN, F.R.S., &c.

The only excuse for publishing the following meagre notes is that practically nothing whatever has been written on the *Neuroptera* of these islands. So far as Guernsey is concerned I received valuable assistance from Mr. W. A. Luff, of St. Peter Port, when engaged on the "Revision and Synopsis of the European *Trichoptera*." I recently had the pleasure of making his personal acquaintance, and of finding that he possesses, both in *Trichoptera* and in *Neuroptera* generally, a considerably larger number of species than have been recorded, and he will hereafter furnish a complete list of those found by him in that island. My own notes refer solely to what I myself found in Guernsey, Sark, and Jersey, during a hurried visit from the 5th to 17th of September, which was luckily a period of uninterrupted fine weather.

In two main essentials the local conditions are unfavourable to Neuropterous insects (setting on one side the metamorphic geological horizon). One is the dense population, and the artificially high state of cultivation, both agricultural and horticultural; the other is the comparative scarcity of fresh water. The most productive streams are the short ones that have their origin in the precipitous south side of Guernsey and north side of Jersey—streams that flow through short, deep, and wooded valleys, and are very rapid, and in these cases it is usually only near their mouths that they are worth working; and even then they are apt to be covered by a dense growth of brambles (especially in Guernsey), or choked by waterweeds, which here attain a luxuriance far in excess of what is usual in the south of England. The longer streams flowing through more level country furnish very little. They are prone to lose themselves in moist ground before entering the sea, due largely to the requirements of artificial irrigation. The stream in St. Peter Valley, Jersey, is one of the longest in the islands, and looked promising, but it yielded

nothing whatever. At first I thought this was due to several suspicious-looking mills along its course; but these, on closer acquaintance, seemed to be of a harmless nature (so far as poisoning the water is concerned), and I was forced to the conclusion that the absence of life, both animal and vegetable, in this stream is caused by irrigation, which for a part of the year diverts the water and leaves the natural course dry. Of standing water there is very little; what there is mainly consists of the filtration from the sides of disused granite quarries, with a few small artificial ponds in private grounds. But in the west of Jersey there is a very considerable sheet of water, known as St. Ouen's Pond, to which I was able to devote only one hour.

The foregoing notes are essentially apologetic for the paucity of my captures. Mr. Luff's list will hereafter prove that a resident in one of the islands, working all through the year, and with an intimate knowledge of the country, can show better results; but at its best the list will not be long.

I was unfortunately not able to visit Alderney, owing to the brief stay I was able to make in the islands. Its closer proximity to the French coast renders an examination of its productions much to be desired, more especially regarding the problem opened up by the genus *Philopotamus*, and from the same cause a knowledge of what is to be found along the whole of the French coast opposite to the islands is also highly desirable.

Sark is a little gem of an island. It is not over-cultivated, and, for its size, it possesses a very respectable stream running through a wooded valley (Dixcart Valley), in which are some noble ash trees, &c.

GUERNSEY.

TRICHOPTERA.

Diplectrona felix, McL.—Saints' Bay and Le Gouffre. Of course it is a mere coincidence, but here, as everywhere that I have taken the species, it is associated with brambles most trying to the entomologist.

Philopotamus insularis, McL.—This form (for it is difficult to consider it a species) came originally from Saints' Bay, but it occurs also at Petit Bot and Le Gouffre, and perhaps in other small valleys in the south of the island. Those from Le Gouffre seem to be decidedly smaller and more strongly spotted than the others, and it is the most westerly locality. This is of some importance, as bearing upon the forms of *Philopotamus* found in these islands.

Plectrocnemia geniculata, McL., and *P. conspersa*, Curt., occurred at Saints' Bay and Le Gouffre.

Rhyacophila septentrionis, McL.—Saints' Bay; common at Le Gouffre.

PLANIPENNIA.

Chrysopa flavifrons, Brauer.

Hemerobius orotypus, Wallengr.

PSEUDO-NEUROPTERA.

Psocus bifasciatus, Latr.

Cæcilius pedicularius, L., and *flavidus*, Steph.

Stenopsocus cruciatus, L., and *immaculatus*, Steph.

Peripsocus phæopterus, Steph.

SARK.

TRICHOPTERA.

Micropterna sequax, McL.—Not uncommon in the gigantic masses of *Lastræa filix-mas* in Dixcart Valley.

Tinodes assimilis, McL.—At the little “dribble” forming the mouth of the stream at Dixcart Bay.

PLANIPENNIA.

Chrysopa flava, Scop.—From an ash in Dixcart Valley.

PSEUDO-NEUROPTERA.

Cæcilius flavidus, Steph.—Common.

JERSEY.

TRICHOPTERA.

Micropterna sequax, McL.—Near the source of a stream running south from Trinity Church.

Halesus radiatus, Curt.—One ♂ taken, and several examples seen at the above mentioned locality. It is interesting as being in every respect the British form, and not that generally found on the Continent, which is the *H. interpunctatus* of my “Revision.”

Diptectrona felix, McL.—Grêve de Lecq.

Philopotamus montanus, Donovan, var. *cesareus*, McL.—Very abundant at Grêve de Lecq, where it was originally found by Mr. Luff (not seen elsewhere). There seems little reason for doubt that this beautiful form and the “*Ph. insularis*” of Guernsey are only insular conditions of *Ph. montanus*, of which the typical form is unknown in the islands. Oddly enough the Jersey insect is extremely close to the var. *chrysopterus*, Morton, from the side of a Clydesdale hill. That small islands should produce distinct forms is not surprising; but it is difficult to account for the apparent isolation of such forms as *chrysopterus* and *scoticus*.

Tinodes assimilis, McLach.—Les Coupes.

Rhyacophila septentrionis, McLach.—I am sure it was this insect I saw near the waterfall at Les Mouriers.

Agapetus fuscipes, Curt.—Near Trinity Church.

PSEUDO-NEUROPTERA.

Psocus variegatus, Latr.—On the trunks of old poplars in St. Helier; *Ps. bifasciatus*, Latr.

Cæcilius flavidus, Steph.

Stenopsocus immaculatus, Steph.

Peripsocus phæopterus, Steph.

Cloëon simile, Eaton.—St. Ouen’s Pond.

Sympetrum striolatum, Charp.—Abundant at St. Ouen’s Pond.

Æschna mixta, Latr.—Several examples of an *Æschna* which, from its size, I take to have been this species, were seen at St. Ouen’s Pond, but owing to the nature of the margins it was impossible to capture them.

Enallagma cyathigerum, Charp.—An “*Agrion*” seen at St. Ouen’s Pond was probably this species.

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